

Ambiguity in Choosing Coordinate Systems

Solution:

The most appropriate answer is e.)

Students may have suspicion on d.). We always adopt orthogonal resolution for convenience. However, a non-orthogonal resolution is also possible. Notice that as long as $\mathbf{A} + \mathbf{B} = \mathbf{C}$, then \mathbf{A} and \mathbf{B} can be viewed as resolution of \mathbf{C} . Apparently, there are numerous choices of \mathbf{A} and \mathbf{B} to achieve so.